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Tal 29
W-8000 München 2 (DE)(54) **Liquid crystal display element and a projection type liquid crystal display apparatus.**

(57) A liquid crystal display element comprises a pair of substrates provided with electrodes and a liquid crystal and solidified matrix composite material, disposed between the pair of substrates, which includes a nematic liquid crystal dispersed and held in a solidified matrix, the nematic liquid crystal being such that the refractive index of the liquid crystal is changed depending on states of applying a voltage wherein in a state, the refractive index of the liquid crystal substantially coincides with that of the solidified matrix to thereby pass light, and in the other state, the former does not coincide with the latter to thereby cause the scattering of light, wherein the refractive index anisotropy Δn of the liquid crystal used is 0.18 or higher, and the dielectric anisotropy $\Delta\epsilon_{LC}$ of the liquid crystal used satisfies the relation of $5 < \Delta\epsilon_{LC} < 13$.

EP 0 505 964 A3



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EUROPEAN SEARCH REPORT

Application Number

EP 92 10 4992

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X	EP-A-0 362 776 (ASAHI GLASS) * page 2, line 42 - page 6, line 14 * * page 10, line 07 - line 10 * ---	1,2,4-10	G02F1/1333 H04N9/31
A	US-A-4 707 080 (FERGASON) * column 23, line 52 - column 28, line 25 *	3	
A	--- JOURNAL OF APPLIED PHYSICS. vol. 66, no. 11, December 1989, NEW YORK US pages 5278 - 5284 A.FUH & ALL 'POLYMER DISPERSED NEMATIC' CHAPTERS :I AND II -----	1-3	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			G02F C09K
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 21 MAY 1993	Examiner DIOT P.M.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			